

Options for Closing the Gap on Forestry Management Measures

January 2015

Background/Context

Additional progress is needed in Oregon on the additional management measures for forestry that are necessary to achieve and maintain water quality standards and designated uses. (*struck out fish habitat - was fish habitat included to cover the coho recovery aspect?) The following describes how Oregon may choose to proceed to adopt additional protective forestry measures to satisfy the CZARA additional management measures for forestry (*and help with coho recovery).

General CZARA Guidelines for Approval

There are two pathways for states to achieve an approvable program: 1) *regulatory program*; **OR** 2) *voluntary approach*. A voluntary approach requires that the State provide the following:

- a description of the voluntary programs, including the methods for tracking and evaluating those programs Oregon will use to encourage implementation of the management measures;
- a legal opinion from the attorney general or an attorney representing the agency with jurisdiction for enforcement that such authorities can be used to prevent nonpoint pollution and require management measure implementation, as necessary; and
- a description of the mechanism or process that links the implementing agency with the enforcement agency and a commitment to use the existing authorities where necessary, notwithstanding the statutory “BMP safe harbor” provision in the Forest Practices Act.

Reasonable Options for Oregon to Satisfy ~~Get to~~ the CZARA Additional Management Measures for Forestry (*and Help With Coho Recovery)

• **Riparian Buffers**

- **Medium and Small-Fish Bearing Streams:** State currently pursuing regulatory program
 - Current Deficiencies/Shortfall: ~~Small no-cut buffer~~ Inadequate riparian protections for small and medium fish-bearing streams. They do not ensure forest operations meet the State water quality standards for protecting cold water in small and medium fish bearing streams. ~~Creates temperature, erosion and sediment problems.~~
 - **Ex. 5 - Deliberative**
 - Examples of State Actions Needed: 1) **Complete riparian rule by end of 2015;** 2) Rule should cover a ~~broad range of~~ medium and small-fish bearing streams; and 3) Rule should provide an ~~adequate~~ protective no cut buffers (*with a wider

riparian management zone consistent with National Marine Fisheries (NMFS) science.)

- **Small, Non-fish bearing streams: State is not currently pursuing a regulatory program; voluntary approach would need to address the following:**

- Current Deficiencies/Shortfall: No riparian protections ~~buffers~~ ~~Inadequate (10 foot) and limited (only for small perennial streams) buffer~~ for small, non-fish bearing streams. This does not ensure forest operations meet the State water quality standards for protecting cold water criterion. ~~Creates temperature, erosion and sediment problems for salmon spawning areas and downstream habitat.~~

Ex. 5 - Deliberative

Examples of State Actions Needed: 1) **By end of 2015**, the State should identify adequate no cut buffer with a wider riparian management zone

Ex. 5 - Deliberative

Ex. 5 - Deliberative

2) **By the end of 2015**, the State will identify and provide to NOAA and EPA, the ODF and DEQ general authorities it will rely on to enforce changes when voluntary measures are not implemented. 3) **By end of 2015**, the State should meet other elements needed for voluntary program (see General CZARA Guidelines for Approval above or NOAA and EPA's 2001 memo on Enforceable Policies and Mechanisms for State Coastal Nonpoint Source Programs (<http://coast.noaa.gov/czm/pollutioncontrol/media/epmmemo.pdf>))

- **Roads: Regulatory and/or voluntary approaches would need to address the following**

- Current Deficiencies/Shortfall:
 - *Regulatory* - Recent rule changes and new policies do not sufficiently address water quality impairments associated with ~~“Current ODF voluntary program does not include~~ legacy” roads, (e.g., roads that do not meet current State requirements with respect to siting, construction, maintenance and road drainage,), or impairments associated with the portion of the existing network where construction or reconstruction is not proposed.
 - *Voluntary* – ODF voluntary program does not ~~include~~ adequately address legacy roads, nor has the state satisfied all elements needed for a voluntary program (see above).
- Examples of State Actions Needed:
 - *Regulatory* – **By the end of 2015**, the State should establish regulations and or policies that specifically address legacy roads (e.g. roads that do not meet current State requirements with respect to siting, construction, maintenance and road drainage,) or impairments associated with the

portion of the existing network where construction or reconstruction is not proposed.

- *Voluntary* – **By the end of 2015**, 1) the State should establish a road survey or inventory program that considers both active, inactive, and legacy roads that have the potential to deliver sediment to streams.

Ex. 5 - Deliberative

2) Develop ranking system to establish priorities for road repair or decommissioning; 3) Develop a timeline for addressing priority road issues including retiring or restoring forest roads that impair water quality; 4) Develop a reporting and tracking component to assess progress for remediating identified forest road problems

- **For effective voluntary approach, all are needed as a package. The state must also meet other elements needed for voluntary program (see General CZARA Guidelines for Approval above or NOAA and EPA's 2001 memo on Enforceable Policies and Mechanisms for State Coastal Nonpoint Source Programs (<http://coast.noaa.gov/czm/pollutioncontrol/media/epmmemo.pdf>)).**

- **Landslides: Regulatory and/or voluntary approach would need to address the following:**
 - Current Deficiencies/Shortfall:
 - *Regulatory* - Oregon does not have additional management measures for forestry in place to protect high-risk landslide areas to ensure water quality standards and designated uses (*and fish habitat) are protected. Oregon's rules protect for public safety against shallow, rapidly moving landslides.
 - *Voluntary* – The voluntary measure identified by the State gives landowners credit for leaving standing live trees in landslide prone slopes as an eventual source of large wood for fish-bearing streams. The State hasn't shown how it monitors and tracks the implementation and effectiveness of this measure.
 - Examples of State Actions Needed:
 - *Regulatory* – **By end of 2015**, the State should adopt similar harvest and road construction restrictions for all high-risk landslide prone areas with the potential to impact water quality and designated uses, not just those where landslides pose risks to life and property ~~1) Measures to protect landslide areas;~~
 - *Voluntary* – **By end of 2015**, the State should 1) Establish program that includes a scientifically rigorous process for identifying high-risk areas and unstable slopes based on field review by trained staff. Widely available maps of high-risk landslide areas could improve water quality by informing foresters during harvest planning; 2) Integrate processes to identify high-risk landslide prone areas and specific best management

- practices to protect these areas into the TMDL development process; 3) Adopt BMPs that include employing no-harvest restrictions around high-risk areas and ensuring that roads are designed, constructed, and maintained in such a manner that the risk of triggering slope failures is minimized;
 - For all voluntary programs, the state must meet all elements needed for voluntary program (see General CZARA Guidelines for Approval above or NOAA and EPA's 2001 memo on Enforceable Policies and Mechanisms for State Coastal Nonpoint Source Programs (<http://coast.noaa.gov/czm/pollutioncontrol/media/epmmemo.pdf>))
- **Spray Buffers for Aerial Application of Herbicides on Non-Fish Bearing Streams: regulatory and/or voluntary approaches that could be established**
- Current Deficiencies/Deficiencies:
 - *Regulatory* - Oregon does not have a spray buffer to protect small, non-fish bearing streams when herbicides are aerially applied.
 - *Voluntary* – There are no voluntary spray buffers nor is there monitoring and tracking on small, non-fish bearing streams
 - Examples of State Actions Needed: Riparian buffer protections for non-fish bearing streams may suffice as a protective herbicide spray buffers if riparian buffer protections extend the length of the non-fish bearing stream where spraying occurs; or
 - *Regulatory* – **By end of 2015**, the State should adopt rules for aerial herbicide spray buffers for small, non-fish bearing streams.
 - *Voluntary* – **By end of 2015**, the State should 1) develop guidelines for buffer protections for aerially applied herbicides on small, non-fish bearing streams; 2) Monitor and track voluntary measures; 3) Identify ODF and DEQ general authorities for enforcing changes when voluntary measures are not implemented; 4) Revise ODF Notification of Operation form to explicitly include that aerial applicators will adhere to FIFRA labels, especially for herbicides that are prohibited from spraying in/above waterbodies, for all stream types, including non-fish bearing streams.
 - For all voluntary programs, the state must meet all elements needed for voluntary program (see General CZARA Guidelines for Approval above or NOAA and EPA's 2001 memo on Enforceable Policies and Mechanisms for State Coastal Nonpoint Source Programs (<http://coast.noaa.gov/czm/pollutioncontrol/media/epmmemo.pdf>))

Options for Closing the Gap on Forestry Management Measures

January 2015

Background/Context

Additional progress is needed in Oregon on the additional management measures for forestry management measures that are necessary to achieve and maintain water quality standards and designated uses so that they are protective of water quality and ~~(*) struck out fish habitat - was is fish habitat~~.

Ex. 5 - Deliberative

The following describes how Oregon may choose to proceed to adopt additional protective forestry measures to satisfy the CZARA additional management measures for forestry (*) and help with

Ex. 5 - Deliberative

Ex. 5 - Deliberative

General CZARA Guidelines for Approval

There are two pathways for states to achieve an approvable program: 1) *regulatory program*; OR 2) *voluntary approach*. A voluntary approach requires that the State provide the following:

- a description of the voluntary programs, including the methods for tracking and evaluating those programs. Oregon will use to encourage implementation of the management measures;
- a legal opinion from the attorney general or an attorney representing the agency with jurisdiction for enforcement that such authorities can be used to prevent nonpoint pollution and require management measure implementation, as necessary; and
- a description of the mechanism or process that links the implementing agency with the enforcement agency and a commitment to use the existing authorities where necessary, notwithstanding the statutory “BMP safe harbor” provision in the Forest Practices Act.

• a program description, monitoring, tracking, and an enforceable authority to back up the voluntary program. If the State chooses to pursue a voluntary approach, the State needs to identify state enforcement authorities that can be used to prevent nonpoint pollution and expressly commit to use those authorities if voluntary measures are not complied with or where voluntary measures are inadequate in delivering the needed protections that could be relied upon notwithstanding the statutory “BMP safe harbor” provision in the Forest Practices Act. The State needs to describe the mechanism or process that links the implementing agency with the enforcement agency.

Reasonable Options for Oregon to mSatisfy Move Get to an Approvable the CZARA

Ex. 5 - Deliberative

Ex. 5 - Deliberative

Formatted: Font: 12 pt

Comment [AC1]: The add MMs are not the same as the actual forestry MM. Need to be clear.

Formatted: Font: Times New Roman, 12 pt

Comment [AC2]: Important to be consistent with statutory lang.

Formatted: Highlight

Formatted: Font: Times New Roman, 12 pt, Highlight

Formatted: Highlight

Comment [AC3]: I think we need to make this statement clearly. Doing this will enable them to address the CZARA add MMs for forestry. And will help with coho recovery (but isn't all they did for coho, or may CZARA ... [1]

Formatted: Highlight

Formatted ... [2]

Formatted: Highlight

Formatted ... [3]

Formatted ... [4]

Formatted: Bullets and Numbering

Formatted ... [5]

Formatted ... [6]

Formatted ... [7]

Formatted ... [8]

Formatted ... [9]

Formatted ... [10]

Comment [AC4]: Need to make sure langua ... [11]

Formatted ... [12]

Formatted: Font: Times New Roman, 12 pt

Formatted: Font: Times New Roman, 12 pt

Formatted: Font: Times New Roman, 12 pt

Formatted ... [13]

Formatted: Font color: Green, Highlight

Formatted: Font color: Green, Highlight

Formatted ... [14]

Formatted: Strikethrough, Highlight

Formatted ... [15]

Formatted: Footer

Address Limitations in Forestry That Affect Coho Recovery

• Riparian Buffers

- **Medium and Small-Fish Bearing Streams:** State currently pursuing regulatory program
 - **Current Deficiencies/Shortfall:** ~~Small no-cut buffer~~ ~~Inadequate riparian protections~~ for small and medium fish-bearing streams. ~~Do They Do not ensure forest operations meet the State water quality standards for protecting cold water in small and medium fish bearing streams. Creates temperature, erosion and sediment problems.~~ **Ex. 5 - Deliberative**
 - **Examples of State Actions Needed:** 1) **Complete riparian rule by end of 2015;** 2) Rule should cover a broad range of medium and small-fish bearing streams; and 3) Rule should provide an adequate protective no cut buffers (*with a wider riparian management zone consistent with National Marine Fisheries (NMFS) science).

- **Small, Non-fish bearing streams:** State is not currently pursuing a regulatory program; voluntary approach would need to address the following:



- **Current Deficiencies/Shortfall:** ~~No~~ ~~No riparian protections~~ ~~buffers~~ ~~inadequate (10 foot) and limited (only for small perennial streams) buffer~~ for small, non-fish bearing streams. This does ~~Do not~~ ensure forest operations meet the State water quality standards for protecting cold water criterion. ~~Creates temperature, erosion and sediment problems for salmon spawning areas and downstream habitat. (*Inadequate protections are limiting coho recovery.) (need to have NMFS/NOAA's weigh in on this statement)~~

Examples of State Actions Needed: 1) **By end of 2015, the State should identify** ~~a~~ **Adequate no cut buffer with a wider riparian management zone** **Ex. 5 - Deliberative**

Ex. 5 - Deliberative

- ~~2) By the end of 2015, the State will identify and provide to NOAA and EPA, the ODF and DEQ general authorities it will rely on to enforce changes when voluntary measures are not implemented. 3) By end of 2015, the State should~~ **Meet other elements needed for voluntary program (see General CZARA Guidelines for Approval above or NOAA and EPA's 2001 memo on Enforceable Policies and Mechanisms for State Coastal Nonpoint Source Programs (<http://coast.noaa.gov/czm/pollutioncontrol/media/epmmemo.pdf>))** ~~2) Monitoring, tracking, and reporting similar to other ODF programs for other tree harvests; and 3) Identify ODF and DEQ general authorities for enforcing changes in critical areas when voluntary measures are not implemented. 3) By the end of 2015, the~~

Formatted	... [17]
Formatted	... [18]
Formatted	... [19]
Formatted	... [20]
Comment [AC5]: Our decision doc does not	... [21]
Formatted	... [22]
Formatted	... [23]
Formatted	... [24]
Formatted	... [25]
Comment [AC6]: I agree with Alan's comm	... [26]
Formatted	... [27]
Formatted	... [28]
Formatted	... [29]
Formatted	... [30]
Formatted	... [31]
Formatted	... [32]
Formatted	... [33]
Formatted	... [34]
Formatted	... [35]
Comment [sjs7]: Edits pending staff review	... [37]
Comment [HA8]: OAR 629-640-0200(6) p	... [38]
Formatted	... [36]
Formatted	... [39]
Formatted	... [40]
Formatted	... [41]
Formatted	... [42]
Formatted	... [43]
Formatted	... [44]
Formatted	... [45]
Formatted	... [46]
Formatted	... [47]
Formatted	... [48]
Formatted	... [49]
Comment [AC9]: Agreed: See earlier comm	... [50]
Formatted	... [51]
Formatted	... [52]
Formatted: Bullets and Numbering	... [53]
Formatted	... [54]
Formatted	... [55]
Comment [AC10]: Rather than resumm	... [56]
Formatted	... [57]
Formatted	... [16]

state will identify and provide to NOAA and EPA, the ODF and DEQ general authorities it will rely on to enforce changes when voluntary measures are not implemented.

Roads:

- **Regulatory and/or voluntary approaches would need to address the following**

- **Current Deficiencies/Shortfall:**

- - Regulatory - Recent rule changes and new policies do not sufficiently address water quality impairments associated with “Current ODF voluntary program does not include legacy” roads, (e.g. i.e. roads that do not meet current State requirements with respect to siting, construction, maintenance and road drainage.), or impairments associated with the portion of the existing network where construction or reconstruction is not proposed.

- - Voluntary – ODF voluntary program does not include adequately address legacy roads, nor has the state satisfied all elements needed for a voluntary program (see above).

- **Examples of State Actions Needed:**

- - Regulatory – **By the end of 2015**, the State should establish regulations and or policies that specifically address legacy roads (e.g. roads that do not meet current State requirements with respect to siting, construction, maintenance and road drainage.) or impairments associated with the portion of the existing network where construction or reconstruction is not proposed.

- - Voluntary – **By the end of 2015**, the State should establish a road survey or inventory program that considers both active, inactive, and legacy roads that have the potential to deliver sediment to streams.

Ex. 5 - Deliberative Develop ranking system to establish priorities for road repair or decommissioning; 3) Develop a timeline for addressing priority road issues including retiring or restoring forest roads that impair water quality; 4) Develop a reporting and tracking component to assess progress for remediating identified forest road problems.

- - **For effective voluntary approach, all are needed as a package. The state must also meet other elements needed for voluntary program (see General CZARA Guidelines for Approval above or NOAA and EPA’s 2001 memo on Enforceable Policies and Mechanisms for State Coastal Nonpoint Source Programs (<http://coast.noaa.gov/czm/pollutioncontrol/media/epmmemo.pdf>)).**

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted ... [58]

Formatted: Indent: Left: 0.38"

Formatted: Indent: Left: 1"

Formatted: Font: Bold

Formatted: Indent: Left: 1"

Formatted: Bullets and Numbering

Formatted: Indent: Left: 1.25"

Formatted ... [59]

Formatted ... [60]

Comment [sjs11]: Ex. 5 - Attorney Client ... [61]

Comment [HA12]: The statement is accurate ... [62]

Formatted: Font: Bold, Font color: Auto

Formatted ... [63]

Formatted: Indent: Left: 1"

Formatted ... [64]

Formatted: Indent: Left: 1.25"

Formatted: Bullets and Numbering

Formatted: Font: Bold, Font color: Auto

Formatted ... [65]

Comment [sjs13]: Ex. 5 - Attorney Client ... [66]

Comment [HA14]: Ex. 5 - Attorney Client ... [67]

Formatted: Font: Times New Roman, 12 pt

Comment [AC15]: I'm hesitant referring to ... [68]

Comment [AC16]: Can combine 2&3 into ... [69]

Formatted: Font: Times New Roman, 12 pt

Formatted: Font: Times New Roman, 12 pt

Comment [sjs17]: See p.61 on Appendix A ... [70]

Formatted ... [71]

Comment [SS18]: This reads like a new "co ... [72]

Formatted ... [73]

Formatted ... [74]

Comment [AC19]: Rather than resumer ... [75]

Formatted: Font: Bold, Font color: Auto

Formatted: Footer

Establish regulations and/or policies that specifically address legacy roads (e.g. roads that do not meet current State requirements with respect to siting, construction, maintenance and road drainage,) or impairments associated with the portion of the existing network where construction or reconstruction is not proposed.

nor has the state satisfied all elements needed for a voluntary program (see above). Voluntary program does not include monitoring and tracking nor does identification of enforceable authorities to back-up voluntary program.

Examples of State Actions Needed: 1) Establishing a road survey or inventory program that considers both active, inactive, and legacy roads that to include legacy roads in road inventory; 2) Include legacy roads in roads inventory, including legacy roads have the potential to deliver sediment to streams; 3) Develop ranking system to establish priorities for road repair or decommissioning; 4) Develop a timeline for addressing priority road issues including retiring or restoring forest roads that impair water quality; 5) Conduct evaluation, problem identification process and schedule for repairing problem roads; 6) Develop a reporting and tracking component to assess progress for remediating identified forest road problems. Monitor and track voluntary measures.

Ex. 5 - Deliberative

Identify ODF and DEQ general authorities for enforcing changes in critical areas when voluntary measures are not implemented. (For effective voluntary approach, all 1-6 are needed as a package.

All voluntary approaches. The state must also meet other elements needed for voluntary program (see General CZARA Guidelines for Approval above or NOAA and EPA's 2001 memo on Enforceable Policies and Mechanisms for State Coastal Nonpoint Source Programs (<http://coast.noaa.gov/czm/pollutioncontrol/media/epmmemo.pdf>) need monitoring, tracking and identification of enforcement authorities that can be used if voluntary approach fails to achieve the desired results.)

- **Landslides:** Regulatory and/or voluntary approach would need to address the following:

- **Current Deficiencies/Shortfall:**

- **Regulatory** - Oregon does not have additional management measures for forestry in place to protect high-risk sites/landslide areas to ensure water quality standards and designated uses (*and fish habitat?) are protected. Oregon's rules protect for public safety against shallow, rapidly moving landslides.

Formatted	... [77]
Formatted	... [78]
Formatted	... [79]
Formatted	... [80]
Formatted	... [81]
Formatted	... [82]
Comment [HA20]: The statement is accurate	... [84]
Formatted	... [83]
Formatted	... [85]
Formatted	... [86]
Comment [sjs21]: What does this even look	... [87]
Comment [HA22]: Steve, I think the point	... [89]
Formatted	... [88]
Formatted	... [90]
Comment [AC23]: I'm hesitant referring to	... [91]
Comment [AC24]: Can combine 2&3 into	... [93]
Formatted	... [92]
Formatted	... [94]
Comment [sjs25]: See p.61 on Appendix A	... [95]
Formatted	... [96]
Comment [SS26]: This reads like a new "co	... [97]
Formatted	... [98]
Comment [AC27]: Just refer them to stand	... [99]
Formatted	... [100]
Formatted	... [101]
Formatted	... [102]
Formatted	... [103]
Comment [AC28]: Rather than resumm	... [104]
Formatted	... [105]
Formatted	... [106]
Comment [sjs29]: Rationale document s	... [108]
Formatted	... [107]
Formatted	... [109]
Comment [PC30]: Need short description	... [111]
Formatted	... [110]
Formatted	... [112]
Formatted	... [113]
Formatted	... [114]
Formatted: Bullets and Numbering	... [115]
Formatted	... [116]
Formatted	... [76]

◻ Voluntary – The voluntary measure identified by the State gives landowners credit for leaving standing live trees in landslide prone slopes as an eventual source of large wood for fish-bearing streams. The State hasn't shown how it monitors and tracks the implementation and effectiveness of this measure.

Formatted: Indent: Left: 1.25"

○ Examples of State Actions Needed:

Formatted: Font: Not Bold

Formatted: Indent: Left: 1"

Formatted: Font: Bold

Formatted: Indent: Left: 1.25"

Formatted: Bullets and Numbering

■ Regulatory – By end of 2015, the State should 1) adopt similar harvest and road construction restrictions for all high-risk landslide prone areas with the potential to impact water quality and designated uses, not just those where landslides pose risks to life and property; 2) Adopt BMPs that include employing no-harvest restrictions around high-risk areas and ensuring that roads are designed, constructed, and maintained in such a manner that the risk of triggering slope failures is minimized; 1) **Measures to protect landslide areas;**

Formatted: Font: Bold

■ Voluntary – By end of 2015, the State should 1) Establish program that includes a scientifically rigorous process for identifying high-risk areas and unstable slopes based on field review by trained staff. Widely available maps of high-risk landslide areas could improve water quality by informing foresters during harvest planning; 2) Integrate processes to identify high-risk landslide prone areas and specific best management practices to protect these areas into the TMDL development process; 3) Adopt BMPs that include employing no-harvest restrictions around high-risk areas and ensuring that roads are designed, constructed, and maintained in such a manner that the risk of triggering slope failures is minimized;

Formatted: Font: (Default) Times New Roman, 12 pt

For all voluntary programs, the state must meet all elements needed for voluntary program (see General CZARA Guidelines for Approval above or NOAA and EPA's 2001 memo on Enforceable Policies and Mechanisms for State Coastal Nonpoint Source Programs (<http://coast.noaa.gov/czm/pollutioncontrol/media/epmmemo.pdf>))

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted: Indent: Left: 1.25"

Voluntary – The voluntary measure identified by the State gives landowners credit for leaving standing live trees in landslide prone slopes as an eventual source of large wood for fish-bearing streams. The State hasn't shown how it monitors and tracks the implementation and effectiveness of this measure.

Comment [AC31]: Rather than resummize what OR needs to do for voluntary programs and risk mis-stating or missing something recommend just referring them to the bullets above or the EP&M memo for more detail.

Formatted: Font: Bold

Formatted: Bullets and Numbering

Formatted: Indent: Left: 1.5", No bullets or numbering

Examples of State Actions Needed: 2) Voluntary programs to encourage and incentivize forestry BMPs to protect high-risk landslide areas that have the potential to impact water quality and designated uses and ensure that roads are designed to minimize slope failure risk; 1) Establish BMPs could include employing no-harvest restrictions around high-risk areas and ensuring that roads are designed, constructed, and maintained in such a manner that the risk of triggering slope failures is minimized; 3) Voluntary programs that could also includes a scientifically

Formatted: Footer

rigorous process for identifying high-risk areas and unstable slopes based on field review by trained staff. Widely available maps of high-risk landslide areas could improve water quality by informing foresters during harvest planning. Monitor and track voluntary measures (Ex. 5 - Deliberative

Ex. 5 - Deliberative

Integrate processes to identify high risk landslide prone areas and specific best management practices to protect these areas into the TMDL development process.

○ Identify ODF and DEQ general authorities for enforcing changes in critical areas when voluntary measures are not implemented. (For all voluntary programs, the state must meet all elements needed for voluntary program (see General CZARA Guidelines for Approval above or NOAA and EPA's 2001 memo on Enforceable Policies and Mechanisms for State Coastal Nonpoint Source Programs (<http://coast.noaa.gov/czm/pollutioncontrol/media/epmmemo.pdf>)). All voluntary approaches need monitoring, tracking and identification of enforcement authorities that can be used if voluntary approach fails to achieve the desired results.)

○ Spray Buffers for Aerial Application of Herbicides on Non-Fish Bearing Streams: regulatory and/or voluntary approaches that could be established

○ Current Deficiencies/Deficiencies:

- Regulatory - Oregon does not have a spray buffer to protect small, non-fish bearing streams when herbicides are aerially applied.
- Voluntary - There are no voluntary spray buffers nor is there monitoring and tracking on small, non-fish bearing streams.

○ Examples of State Actions Needed: Riparian buffer protections for non-fish bearing streams may suffice as a protective herbicide spray buffers if riparian buffer protections extend the length of the non-fish bearing stream where spraying occurs; or

- Regulatory - By end of 2015, the State should adopt rules for aerial herbicide spray buffers for small, non-fish bearing streams.
- Voluntary - By end of 2015, the State should 1) develop guidelines for buffer protections for aerially applied herbicides on small, non-fish bearing streams; 2) Monitor and track voluntary measures; 3) Identify ODF and DEQ general authorities for enforcing changes when voluntary measures are not implemented; 4) Revise ODF Notification of Operation form to explicitly include that aerial applicators will adhere to FIFRA labels, especially for herbicides that are prohibited from spraying in/above waterbodies, for all stream types, including non-fish bearing streams.
- For all voluntary programs, the state must meet all elements needed for voluntary program (see General CZARA Guidelines for Approval above or NOAA and EPA's 2001 memo on Enforceable Policies and

Comment [AC32]: Added option from decision doc.

Formatted: Font: Times New Roman, 12 pt

Formatted: Font: Bold, Font color: Auto

Formatted: Font: Bold

Formatted: Indent: Left: 1.25", No bullets or numbering

Formatted: No bullets or numbering

Formatted: Font: Not Bold

Comment [AC33]: Rather than resummize what OR needs to do for voluntary programs and risk mis-stating or missing something recommend just referring them to the bullets above or the EP&M memo for more detail.

Formatted: Font: Times New Roman, 12 pt

Formatted: Font: Times New Roman

Formatted: Bullets and Numbering

Formatted: Font: Not Bold, Font color: Auto, Pattern: Clear

Formatted: Font: Times New Roman

Formatted: Font: Times New Roman, Font color: Auto, Pattern: Clear

Formatted: List Paragraph, Indent: Left: 1", Outline numbered + Level: 2 + Numbering Style: Bullet + Aligned at: 0.75" + Tab after: 1" + Indent at: 1"

Formatted: Font: Times New Roman

Formatted: List Paragraph, Outline numbered + Level: 3 + Numbering Style: Bullet + Aligned at: 1.25" + Tab after: 1.5" + Indent at: 1.5", Tab stops: Not at 1.5"

Formatted: Font: Times New Roman, Font color: Auto, Pattern: Clear

Formatted: Font: Times New Roman

Formatted: Font: Times New Roman, 12 pt

Formatted: Font: Times New Roman

Formatted: Font: Times New Roman

Formatted: Bullets and Numbering

Formatted: Font: Times New Roman, Italic

Formatted: Font: Times New Roman

Formatted: Font color: Auto, Pattern: Clear

Formatted

Formatted: Footer

Mechanisms for State Coastal Nonpoint Source Programs
(<http://coast.noaa.gov/czm/pollutioncontrol/media/epmmemo.pdf>)

**Spray Buffers for Aerial Application of Herbicides on Non-Fish Bearing Streams:
regulatory and/or voluntary approach would need to address the following**

- Current Deficiencies/Deficiencies: No spray buffer to protect non-fish bearing streams during the aerial application of herbicides stream from directly application to water.

Examples of State Actions Needed: 1) Adopt rules that would require spray buffers for the aerial application of herbicides along non-fish bearing streams. Oregon may wish to look toward spray buffer requirements neighboring states have established for ideas; or 2) Adopt no-cut riparian buffers for timber harvest along non-fish bearing streams, which, by default, would also provide a buffer during aerial spraying. If the state adopts adequate riparian protections for non-fish bearing streams, it may suffice as a protective herbicide spray buffers. Otherwise, the state may choose to pursue a voluntary approach by doing the following: 1) Expand guidelines for voluntary buffers or buffer protections for the aerial application of herbicides on non-fish bearing streams; 2) Educate and train aerial applicators of herbicides on the new guidance and how to minimize aerial drift to non-fish bearing streams; 3) Revise ODF Notification of Operation form required prior to chemical applications on forestlands to include a check box for aerial applicators to indicate they must adhere to FIFRA labels for all stream types; including non-fish bearing. Otherwise, the state may choose to 1) Revise ODF Notification of Operation form to add a check box for aerial applicators to certify that they will adhere to FIFRA labels for all stream types; 2) Guidelines for voluntary buffer protections for aerial application of herbicides on non-fish bearing streams; 3) Provide better maps of non-fish bearing streams and other sensitive sites and structures to increase awareness of these sensitive areas that need protection among the aerial applicator community; and 3) Encourage the use of GPS technology, linked to maps of non-fish bearing streams, to automatically shut off nozzles before crossing non-fish bearing streams; 4) Monitor and track voluntary measures using existing pesticide regulations; 4) Explore ODF and DEQ general authorities for enforcing changes in critical areas when voluntary measures are not implemented. (For all voluntary programs, the state must meet all elements needed for voluntary program (see General CZARA Guidelines for Approval above or NOAA and EPA's 2001 memo on Enforceable Policies and Mechanisms for State Coastal Nonpoint Source Programs (<http://coast.noaa.gov/czm/pollutioncontrol/media/epmmemo.pdf>))

Comment [AC34]: Rather than resummize what OR needs to do for voluntary programs and risk mis-stating or missing something recommend just referring them to the bullets above or the EP&M memo for more detail.

Formatted: Font: Times New Roman, Font color: Auto, Pattern: Clear

Formatted: Font: Not Bold, Italic

Formatted

Comment [AC35]: Note: Revised for consistency with lang. in last draft of pesticides section I saw but I believe their may be a newer version so Jenny, please confirm this still aligns with latest draft.

Formatted: Font: Times New Roman

Formatted: Default, Indent: Left: 0.25", Add space between paragraphs of the same style, No bullets or numbering

Formatted: Font: 12 pt, Font color: Auto

Comment [AC36]: Ex. 5 - Deliberative

Ex. 5 - Deliberative

Formatted: Font: 12 pt, Font color: Auto

Comment [PC37]: Help me out here. What exactly are we saying here or asking for?

Comment [AC38]: See revised Option 1 for voluntary approach but this has not been resolved yet in tech team.

Formatted: Font: Times New Roman

Formatted: Font: 12 pt, Font color: Auto

Formatted: Font: 12 pt, Font color: Auto

Comment [AC39]: Rather than resummize what OR needs to do for voluntary programs and risk mis-stating or missing something recommend just referring them to the bullets above or the EP&M memo for more detail.

Formatted: Font: Times New Roman

Formatted: Indent: Left: 1", Don't add space between paragraphs of the same style

Formatted: Font: 12 pt

Formatted: Footer

Page 1: [1] Comment [AC3]

Allison Castellan

1/6/2015 5:29:00 PM

I think we need to make this statement clearly. Doing this will enable them to address the CZARA add MMs for forestry.

Ex. 5 - Deliberative

Ex. 5 - Deliberative

Page 1: [2] Formatted

Chris Wong

1/6/2015 8:14:00 PM

Font: Times New Roman, 12 pt, Highlight

Page 1: [3] Formatted

Allison Castellan

1/6/2015 2:25:00 PM

List Paragraph, Bulleted + Level: 1 + Aligned at: 0.75" + Indent at: 1"

Page 1: [4] Formatted

Allison Castellan

1/6/2015 2:25:00 PM

List Paragraph, Bulleted + Level: 1 + Aligned at: 0.75" + Indent at: 1"

Page 1: [5] Formatted

Chris Wong

1/6/2015 8:13:00 PM

Font: (Default) Times New Roman, 12 pt

Page 1: [6] Formatted

Chris Wong

1/6/2015 7:21:00 PM

Bulleted + Level: 1 + Aligned at: 0.75" + Indent at: 1"

Page 1: [7] Formatted

Chris Wong

1/6/2015 8:13:00 PM

Font: (Default) Times New Roman, 12 pt

Page 1: [8] Formatted

Chris Wong

1/6/2015 8:13:00 PM

Font: (Default) Times New Roman, 12 pt

Page 1: [9] Formatted

Chris Wong

1/6/2015 8:13:00 PM

Font: (Default) Times New Roman, 12 pt

Page 1: [10] Formatted

Chris Wong

1/6/2015 7:21:00 PM

Normal, No bullets or numbering

Page 1: [11] Comment [AC4]

Allison Castellan

1/6/2015 5:29:00 PM

Need to make sure language is consistent with EP&M guidance.

Page 1: [12] Formatted

Chris Wong

1/6/2015 7:22:00 PM

Add space between paragraphs of the same style

Page 1: [13] Formatted

Chris Wong

1/6/2015 8:15:00 PM

Font: Times New Roman, 12 pt, Highlight

Page 1: [14] Formatted

Chris Wong

1/6/2015 8:15:00 PM

Font: Times New Roman, 12 pt, Highlight

Page 1: [15] Formatted Font: Times New Roman, 12 pt, Highlight	Chris Wong	1/6/2015 8:15:00 PM
Page 1: [16] Formatted Footer	Henning, Alan	1/6/2015 5:15:00 PM
Page 2: [17] Formatted Highlight	Chris Wong	1/6/2015 8:15:00 PM
Page 2: [18] Formatted Indent: Left: 0", Hanging: 0.19"	Chris Wong	1/6/2015 8:20:00 PM
Page 2: [19] Formatted Indent: Left: 0.38"	Chris Wong	1/6/2015 8:21:00 PM
Page 2: [20] Formatted Indent: Left: 0.75"	Chris Wong	1/6/2015 8:23:00 PM
Page 2: [21] Comment [AC5] Our decision doc does not discuss erosion/sediment problems related to rip protection so agree with Alan's edit to strike this language.	Allison Castellan	1/6/2015 5:29:00 PM
Page 2: [22] Formatted Font: Times New Roman, 12 pt	Chris Wong	1/6/2015 8:13:00 PM
Page 2: [23] Formatted Highlight	Chris Wong	1/6/2015 8:15:00 PM
Page 2: [24] Formatted Font: Bold	Chris Wong	1/6/2015 8:13:00 PM
Page 2: [25] Formatted Highlight	Chris Wong	1/6/2015 8:15:00 PM
Page 2: [26] Comment [AC6]	Allison Castellan	1/6/2015 5:29:00 PM

Ex. 5 - Deliberative

Perhaps changing the language to something along the lines of "Rule should strive to provide protective no cut buffers with wider riparian management

Ex. 5 - Deliberative

Page 2: [27] Formatted Font: Times New Roman, 12 pt, Highlight	Chris Wong	1/6/2015 8:15:00 PM
Page 2: [28] Formatted	Chris Wong	1/6/2015 8:15:00 PM

Highlight

Page 2: [29] Formatted Chris Wong 1/6/2015 8:22:00 PM
Indent: Left: 0.38"

Page 2: [30] Formatted Chris Wong 1/6/2015 8:23:00 PM
Indent: Left: 0.75"

Page 2: [31] Formatted Chris Wong 1/6/2015 8:13:00 PM
Font: (Default) Times New Roman, 12 pt

Page 2: [32] Formatted Chris Wong 1/6/2015 8:23:00 PM
List Paragraph, Indent: Left: 0.75", Add space between paragraphs of the same style

Page 2: [33] Formatted Chris Wong 1/6/2015 8:13:00 PM
Strikethrough

Page 2: [34] Formatted Chris Wong 1/6/2015 8:13:00 PM
Font: (Default) Times New Roman, 12 pt

Page 2: [35] Formatted Chris Wong 1/6/2015 8:13:00 PM
Strikethrough

Page 2: [36] Formatted Chris Wong 1/6/2015 8:13:00 PM
Font: (Default) Times New Roman, 12 pt

Page 2: [37] Comment [sjs7] Sweeney 1/6/2015 1:31:00 PM
Edits pending staff review and consideration of OAR 629-640-0200(6) distributed earlier.

Ex. 5 - Attorney Client

Ex. 5 - Attorney Client

Page 2: [38] Comment [HA8] Henning, Alan 1/6/2015 3:15:00 PM
OAR 629-640-0200(6) provides that "No retention required" for streams in the Coast Range and the Western Cascade. I suggest we go back to the proposed language.

Page 2: [39] Formatted Chris Wong 1/6/2015 8:13:00 PM
Font: (Default) Times New Roman, 12 pt

Page 2: [40] Formatted Chris Wong 1/6/2015 8:15:00 PM
Highlight

Page 2: [41] Formatted Chris Wong 1/6/2015 8:15:00 PM
Font: (Default) Times New Roman, 12 pt, Highlight

Page 2: [42] Formatted Chris Wong 1/6/2015 8:15:00 PM

Highlight

Page 2: [43] Formatted Chris Wong 1/6/2015 8:15:00 PM
Font: (Default) Times New Roman, 12 pt, Highlight

Page 2: [44] Formatted Chris Wong 1/6/2015 8:13:00 PM
Font: (Default) Times New Roman, 12 pt

Page 2: [45] Formatted Chris Wong 1/6/2015 9:01:00 PM
List Paragraph, Indent: Left: 1"

Page 2: [46] Formatted Chris Wong 1/6/2015 8:13:00 PM
Font: (Default) Times New Roman, 12 pt

Page 2: [47] Formatted Chris Wong 1/6/2015 8:15:00 PM
Highlight

Page 2: [48] Formatted Chris Wong 1/6/2015 8:15:00 PM
Font: (Default) Times New Roman, 12 pt, Highlight

Page 2: [49] Formatted Chris Wong 1/6/2015 8:15:00 PM
Font: (Default) Times New Roman, 12 pt, Highlight

Page 2: [50] Comment [AC9] Allison Castellan 1/6/2015 5:29:00 PM
Agreed: Ex. 5 - Deliberative

Page 2: [51] Formatted Chris Wong 1/6/2015 8:15:00 PM
Font: Times New Roman, 12 pt, Highlight

Page 2: [52] Formatted Chris Wong 1/6/2015 8:23:00 PM
List Paragraph, Indent: Left: 0.75", Add space between paragraphs of the same style

Page 2: [53] Change Unknown
Formatted Bullets and Numbering

Page 2: [54] Formatted Chris Wong 1/6/2015 8:15:00 PM
Font: (Default) Times New Roman, 12 pt

Page 2: [55] Formatted Chris Wong 1/6/2015 8:16:00 PM
Font: (Default) Times New Roman, 12 pt

Page 2: [56] Comment [AC10] Allison Castellan 1/6/2015 5:29:00 PM
Rather than resummerize what OR needs to do for voluntary programs and risk mis-stating or missing something recommend just referring them to the bullets above or the EP&M memo for more detail.

Page 2: [57] Formatted Chris Wong 1/6/2015 8:13:00 PM
Font: Not Bold

Page 3: [58] Formatted Chris Wong 1/6/2015 8:13:00 PM
Font: (Default) +Body (Calibri), 11 pt, Not Bold

Page 3: [59] Formatted Chris Wong 1/6/2015 8:13:00 PM
Strikethrough

Page 3: [59] Formatted Chris Wong 1/6/2015 8:13:00 PM
Strikethrough

Page 3: [60] Formatted Chris Wong 1/6/2015 8:24:00 PM
List Paragraph, Indent: Left: 1.25", Add space between paragraphs of the same style, Bulleted + Level: 4
+ Aligned at: 1.75" + Indent at: 2"

Page 3: [61] Comment [sjs11] Sweeney 1/6/2015 7:34:00 PM

Ex. 5 - Attorney Client

Page 3: [62] Comment [HA12] Henning, Alan 1/6/2015 7:34:00 PM
The statement is accurate as written.

Page 3: [63] Formatted Chris Wong 1/6/2015 8:13:00 PM
Font: (Default) Times New Roman, 12 pt

Page 3: [64] Formatted Chris Wong 1/6/2015 8:13:00 PM
Font: Times New Roman, 12 pt, Font color: Red

Page 3: [64] Formatted Chris Wong 1/6/2015 8:13:00 PM
Font: Times New Roman, 12 pt, Font color: Red

Page 3: [65] Formatted Chris Wong 1/6/2015 8:13:00 PM
Font: (Default) Times New Roman, 12 pt, Italic

Page 3: [65] Formatted Chris Wong 1/6/2015 8:13:00 PM
Font: (Default) Times New Roman, 12 pt, Italic

Page 3: [65] Formatted Chris Wong 1/6/2015 8:13:00 PM
Font: (Default) Times New Roman, 12 pt, Italic

Page 3: [65] Formatted Chris Wong 1/6/2015 8:13:00 PM
Font: (Default) Times New Roman, 12 pt, Italic

Page 3: [66] Comment [sjs13]

Sweeney

1/6/2015 7:35:00 PM

Ex. 5 - Attorney Client

Page 3: [67] Comment [HA14]

Henning, Alan

1/6/2015 7:35:00 PM

Ex. 5 - Attorney Client

Page 3: [68] Comment [AC15]

Allison Castellan

1/6/2015 7:35:00 PM

Ex. 5 - Deliberative

Page 3: [69] Comment [AC16]

Allison Castellan

1/6/2015 7:35:00 PM

Can combine 2&3 into one item. Also revised to be consistent with lang. in the decision doc.

Page 3: [70] Comment [sjs17]

Sweeney

1/6/2015 7:35:00 PM

Ex. 5 - Attorney Client

Page 3: [71] Formatted

Chris Wong

1/6/2015 8:13:00 PM

Font: Times New Roman, 12 pt

Page 3: [71] Formatted

Chris Wong

1/6/2015 8:13:00 PM

Font: Times New Roman, 12 pt

Page 3: [72] Comment [SS18]

Stephen Sweeney

1/6/2015 7:35:00 PM

Ex. 5 - Attorney Client

Page 3: [73] Formatted

Chris Wong

1/6/2015 8:13:00 PM

Font: Times New Roman, 12 pt

Page 3: [73] Formatted

Chris Wong

1/6/2015 8:13:00 PM

Font: Times New Roman, 12 pt

Page 3: [74] Formatted

Chris Wong

1/6/2015 8:24:00 PM

Indent: Left: 1.25", Bulleted + Level: 4 + Aligned at: 1.75" + Indent at: 2"

Page 3: [75] Comment [AC19]

Allison Castellan

1/6/2015 7:35:00 PM

Rather than resumerize what OR needs to do for voluntary programs and risk mis-stating or missing something recommend just referring them to the bullets above or the EP&M memo for more detail.

Page 1: [76] Formatted

Henning, Alan

1/6/2015 5:15:00 PM

Footer

Page 4: [77] Formatted

Chris Wong

1/6/2015 8:13:00 PM

Font: (Default) Times New Roman, 12 pt, Font color: Red

Page 4: [78] Formatted Chris Wong 1/6/2015 7:34:00 PM
Add space between paragraphs of the same style, No bullets or numbering

Page 4: [79] Formatted Chris Wong 1/6/2015 8:13:00 PM
Font: Bold, Font color: Auto

Page 4: [80] Formatted Chris Wong 1/6/2015 7:34:00 PM
Indent: Left: 1.25", Add space between paragraphs of the same style, No bullets or numbering

Page 4: [81] Formatted Chris Wong 1/6/2015 8:13:00 PM
Font: (Default) Times New Roman, 12 pt

Page 4: [82] Formatted Henning, Alan 1/6/2015 5:57:00 PM
List Paragraph, Indent: Left: 1.5", Add space between paragraphs of the same style, No bullets or numbering

Page 4: [83] Formatted Chris Wong 1/6/2015 7:35:00 PM
Add space between paragraphs of the same style, No bullets or numbering

Page 4: [84] Comment [HA20] Henning, Alan 1/6/2015 3:32:00 PM
The statement is accurate as written.

Page 4: [85] Formatted Chris Wong 1/6/2015 8:13:00 PM
Font: Times New Roman, 12 pt

Page 4: [85] Formatted Chris Wong 1/6/2015 8:13:00 PM
Font: Times New Roman, 12 pt

Page 4: [86] Formatted Chris Wong 1/6/2015 8:13:00 PM
Font: Times New Roman, 12 pt, Font color: Red

Page 4: [86] Formatted Chris Wong 1/6/2015 8:13:00 PM
Font: Times New Roman, 12 pt, Font color: Red

Page 4: [86] Formatted Chris Wong 1/6/2015 8:13:00 PM
Font: Times New Roman, 12 pt, Font color: Red

Page 4: [87] Comment [sjs21] Sweeney 1/6/2015 1:12:00 PM

Ex. 5 - Attorney Client

Page 4: [88] Formatted Chris Wong 1/6/2015 8:13:00 PM
Font: Times New Roman, 12 pt

Ex. 5 - Attorney Client

Font: Times New Roman, 12 pt

Ex. 5 - Deliberative

Font: Times New Roman, 12 pt

Font: Times New Roman, 12 pt

Font: Times New Roman, 12 pt

Can combine 2&3 into one item. Also revised to be consistent with lang. in the decision doc.

Font: Times New Roman, 12 pt

Font: Times New Roman, 12 pt

Ex. 5 - Attorney Client

Font: Times New Roman, 12 pt

Font: Times New Roman, 12 pt

Font: Times New Roman, 12 pt

Ex. 5 - Attorney Client

Font: 12 pt

Page 4: [98] Formatted Font: 12 pt	Chris Wong	1/6/2015 8:13:00 PM
--	-------------------	----------------------------

Page 4: [98] Formatted Font: 12 pt	Chris Wong	1/6/2015 8:13:00 PM
--	-------------------	----------------------------

Page 4: [98] Formatted Font: 12 pt	Chris Wong	1/6/2015 8:13:00 PM
--	-------------------	----------------------------

Page 4: [98] Formatted Font: 12 pt	Chris Wong	1/6/2015 8:13:00 PM
--	-------------------	----------------------------

Page 4: [98] Formatted Font: 12 pt	Chris Wong	1/6/2015 8:13:00 PM
--	-------------------	----------------------------

Page 4: [98] Formatted Font: 12 pt	Chris Wong	1/6/2015 8:13:00 PM
--	-------------------	----------------------------

Page 4: [99] Comment [AC27] Just refer them to standard voluntary program requirements.	Allison Castellan	1/6/2015 5:29:00 PM
---	--------------------------	----------------------------

Page 4: [100] Formatted Font: Times New Roman, 12 pt	Chris Wong	1/6/2015 8:13:00 PM
--	-------------------	----------------------------

Page 4: [100] Formatted Font: Times New Roman, 12 pt	Chris Wong	1/6/2015 8:13:00 PM
--	-------------------	----------------------------

Page 4: [100] Formatted Font: Times New Roman, 12 pt	Chris Wong	1/6/2015 8:13:00 PM
--	-------------------	----------------------------

Page 4: [100] Formatted Font: Times New Roman, 12 pt	Chris Wong	1/6/2015 8:13:00 PM
--	-------------------	----------------------------

Page 4: [101] Formatted Indent: Left: 2.25", No bullets or numbering	Henning, Alan	1/6/2015 5:45:00 PM
--	----------------------	----------------------------

Page 4: [102] Formatted Indent: Left: 1.29", No bullets or numbering	Henning, Alan	1/6/2015 5:45:00 PM
--	----------------------	----------------------------

Page 4: [103] Formatted Font: Bold	Chris Wong	1/6/2015 8:13:00 PM
--	-------------------	----------------------------

Page 4: [104] Comment [AC28] **Allison Castellan** **1/6/2015 5:29:00 PM**

Rather than resummerize what OR needs to do for voluntary programs and risk mis-stating or missing something recommend just referring them to the bullets above or the EP&M memo for more detail.

Page 4: [105] Formatted **Chris Wong** **1/6/2015 8:13:00 PM**

Font: Times New Roman, 12 pt, Bold

Page 4: [106] Formatted **Chris Wong** **1/6/2015 8:22:00 PM**

Indent: Left: 0.63"

Page 4: [107] Formatted **Chris Wong** **1/6/2015 8:13:00 PM**

Strikethrough

Page 4: [108] Comment [sjs29] **Sweeney** **1/6/2015 1:15:00 PM**

Ex. 5 - Attorney Client

Page 4: [109] Formatted **Chris Wong** **1/6/2015 8:13:00 PM**

Font: Times New Roman, 12 pt

Page 4: [110] Formatted **Chris Wong** **1/6/2015 8:50:00 PM**

Indent: Left: 1"

Page 4: [111] Comment [PC30] **Psyk, Christine** **12/23/2014 11:20:00 AM**

Need short description of current inadequacy.

Page 4: [112] Formatted **Chris Wong** **1/6/2015 8:13:00 PM**

Font: Times New Roman, 12 pt

Page 4: [112] Formatted **Chris Wong** **1/6/2015 8:13:00 PM**

Font: Times New Roman, 12 pt

Page 4: [113] Formatted **Chris Wong** **1/6/2015 8:13:00 PM**

No underline

Page 4: [114] Formatted **Chris Wong** **1/6/2015 8:24:00 PM**

Indent: Left: 1.25"

Page 4: [115] Change **Chris Wong** **1/6/2015 7:41:00 PM**

Formatted Bullets and Numbering

Page 4: [116] Formatted **Chris Wong** **1/6/2015 8:17:00 PM**

Highlight

